EC-804 B.E. VIII Semester Examination, June 2015

TV & Radar Engineering

Time: Three Hours Maximum Marks: 70

Note: i) Attempt one question from each unit, ii) Each question carry equal marks.

Unit-I

1. a) What is flicker? How it can be removed? Explain interlaced scanning?

b) Explain the working principle of silicon vidicon picture tube.

OR

2. a) Draw the composite video signal end explain the importance of all the pulses.

b) Explain about the CCD image sensors.

Unit-II

3. a) Explain the principle working oftfinitron picture tube.

b) With the help of block diagram explain TV transmitter.

OR

4. a) Explain the principle of plasma and LCD displays.

b) With the help of block diagram explain colour television receiver.

Unit-III

5. a) Discuss the merits of digital technology, b) Discuss the principle workingpfCCTV.

OR

6. a) Discuss the principle working of video and audio processor unit.

b) Discuss the principle working of HDTV.

Unit-IV

7. a) With the help of block diagram explain the working of Radar and determine the Radar range equation.

b) Discuss the principle of MTI Radar.

OR

8. a) What do you understand by Radar cross section of target? Also discuss about pulse repetition frequency and range ambiguities.

b) Discuss the principle working of FM - CW radar.

Unit-V

9. Write short notes on the following

a) Displays type A and PPL b) Synthetic aperture radar.

OR

10. Write short notes on the following

a) Air Surveillance Radar (ASR) b) Bistatic radar.